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### Abstract

The present invention relates to a digital image recognition system having  
10 a minimum constructional length of less than one millimetre. The image  
recognition system hereby comprises a microlens array, a detector array  
and optionally a pinhole array. The mode of operation of this image  
recognition system is based on a separate imaging of different solid angle  
15 segments of the object space by means of a multiplicity of parallel optical  
channels. The optical axes of the individual optical channels thereby have  
different inclinations so that they represent a function of the distance of  
the optical channel from the centre of the side of the image recognition  
system orientated towards the image, as a result of which the ratio of the  
size of the field of view to the image field size can be determined  
20 specifically. Detectors are thereby used with such high sensitivity that the  
detectors have a large pitch with a small active surface area.